

IN THE CLAIMS

1. (Currently Amended) A recording apparatus for recording an audio signal and a video signal on an information recording medium, said recording apparatus comprising:

video packetized elementary stream packet generating means for generating video packetized elementary stream packets by dividing a video elementary stream in which a video signal is compressed and coded according to a predetermined method by a predetermined number of video frames and by adding a header;

audio packetized elementary stream packet generating means for generating audio packetized elementary stream packets by dividing an audio elementary stream in which an audio signal is compressed and coded according to a predetermined method by a predetermined number of audio frames and by adding a header;

video packetized elementary stream packet unit generating means for generating a video packetized elementary stream packet unit by combining a predetermined number of the video packetized elementary stream packets;

audio packetized elementary stream packet unit generating means for generating an audio packetized elementary stream packet unit by combining the audio packetized elementary stream packets corresponding to the video packetized elementary stream packet unit;

sync block generating means for generating sync blocks by alternately disposing the video packetized elementary stream packet unit and the audio packetized elementary stream packet unit and by converting the video packetized elementary stream packet unit and the audio packetized elementary stream packet unit into a predetermined recording format; and

recording means for recording the sync blocks on said information recording medium; wherein said sync block generating means records a flag indicating whether a data area of the sync block is totally occupied with effective data in a header of the sync block, and, when the data area of the sync block is not totally occupied with the effective data, a data length of the effective data is recorded in a head of the data area.

2. (Currently Amended) [[A]] The recording apparatus according to claim 1, wherein the predetermined method for compressing and coding the video signal and the predetermined method for compressing and coding the audio signal are MPEG Moving Picture Experts Group (MPEG) methods.

Claims 3-7. (Canceled)

8. (Currently Amended) [[A]] The recording apparatus according to claim 1, wherein said sync block generating means generates the sync block by recording identification information indicating the data type of the sync block in a header of the sync block.

Claims 9-10. (Canceled)

11. (Currently Amended) A recording method for use in a recording apparatus which records an audio signal and a video signal on an information recording medium, said recording method comprising the steps of:

~~a video packetized elementary stream packet generating step~~ of generating video packetized elementary stream packets by dividing a video elementary stream in which a video signal is compressed and coded according to a predetermined method by a predetermined number of video frames and by adding a header;

~~an audio packetized elementary stream packet generating step~~ of generating audio packetized elementary stream packets by dividing an audio elementary stream in which an audio signal is compressed and coded according to a predetermined method by a predetermined number of audio frames and by adding a header;

~~a video packetized elementary stream packet unit generating step~~ of generating a video packetized elementary stream packet unit by combining a predetermined number of the video packetized elementary stream packets;

~~an audio packetized elementary stream packet unit generating step~~ of generating an audio packetized elementary stream packet unit by combining the audio packetized elementary stream packets corresponding to the video packetized elementary stream packet unit;

~~a sync block generating step~~ of generating sync blocks by alternately disposing the video packetized elementary stream packet unit and the audio packetized elementary stream packet unit and by converting the video packetized elementary stream packet unit and the audio packetized elementary stream packet unit into a predetermined recording format; and

~~a recording step~~ of recording the sync blocks on said information recording medium;

wherein said sync block generating step records a flag indicating whether a data area of the sync block is totally occupied with effective data in a header of the sync block, and, when the data area of the sync block is not totally occupied with the effective data, a data length of the effective data is recorded in a head of the data area.

12. (Currently Amended) A recording medium for storing a computer-readable program used for recording an audio signal and a video signal on an information recording medium, said computer-readable program comprising the steps of:

~~a video packetized elementary stream packet generating step~~ of generating video packetized elementary stream packets by dividing a video elementary stream in which a video signal is compressed and coded according to a predetermined method by a predetermined number of video frames and by adding a header;

~~an audio packetized elementary stream packet generating step~~ of generating audio packetized elementary stream packets by dividing an audio elementary stream in which an audio signal is compressed and coded according to a predetermined method by a predetermined number of audio frames and by adding a header;

~~a video packetized elementary stream packet unit generating step~~ of generating a video packetized elementary stream packet unit by combining a predetermined number of the video packetized elementary stream packets;

~~an audio packetized elementary stream packet unit generating step~~ of generating an audio packetized elementary stream packet unit by combining the audio packetized elementary stream packets corresponding to the video packetized elementary stream packet unit;

~~a sync block generating step~~ of generating sync blocks by alternately disposing the video packetized elementary stream packet unit and the audio packetized elementary stream packet unit and by converting the video packetized elementary stream packet unit and the audio packetized elementary stream packet unit into a predetermined recording format; and

~~a recording step~~ of recording the sync blocks on said information recording medium;  
wherein said sync block generating step records a flag indicating whether a data area of the sync block is totally occupied with effective data in a header of the sync block, and, when the data area of the sync block is not totally occupied with the effective data, a data length of the effective data is recorded in a head of the data area.

Claims 13-34. (Canceled)